

# TNB260

Teltonika as a one of leading IoT companies is always on the same foot with the latest technologies. TNB260 is our first NB-IOT module. We are proud of it because it's enriched with the future technologies although is smallest in class. Our module provides you all the benefits of NB-IoT: ultra low power consumption, OTDOA positioning, higher data rate with 2 HARQ, mobility up to 90km/h, lots of interfaces and networking protocols support, it opens many new markets for you!

## Discover new markets

NB-IoT is a new technology to the market, it opens huge possibilities for new solutions in transportation, metering, health care, payment, security, industrial computing, remote maintenance & control and more. Establish and create new partnerships with customers. Teltonika provides worldwide coverage solution.

## Ultra Low Power Design

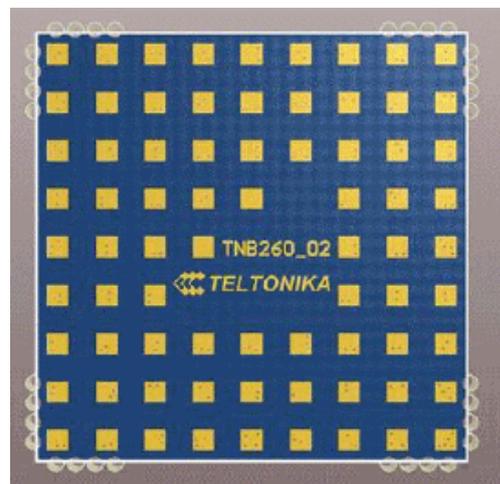
TNB260 is an ultra-low power module, it allows achieving less than 4 $\mu$ A consumption in deep sleep mode! It is thousand times less than conventional 2G/3G modules. With simple 3600mAh battery with 50% efficiency you get autonomous device operation for up to 10 years!

## Positioning

Teltonika NB-IoT module offers OTDOA cell positioning technology. With no additional modules you can achieve accuracy of 30 - 100m. This is usually sufficient for simple tracking solutions. In case you need high accuracy for your device, TNB260 can be combined with a GNSS module for less than 3 meters accuracy.

## Flexibility

New platform combines NB-IoT advantages and Teltonika experience in Internet of Things market. Depending on different client's needs, we can always offer most suitable solution! In case you need high tracking precision, we can supply device with optional GNSS module. In case you need more advanced solutions, TNB260 can be combined with WiFi and/or Bluetooth modules.



# TNB260 PRODUCT DETAILS

## HARDWARE

Size	14.2 x 14.2 mm	
Chip	MT2625 SOC (NB-IOT Platform)	
Footprint	LGA type	
3GPP standards	NB-IoT R13	
Supported bands	B1/B3/B5/B8/B20	
MCU	ARM Cortex M4	
Flash memory	4 MB	
Operating temperature	-40°C to +85°C	
Supply voltage	3.0V ~ 3.6V	
Power consumption	Transmission (Tx)	<304 mA@23dBm <44 mA@0dBm
	Reception (Rx)	~23 mA
	Idle	0.1 mA @ SYSCLK=32KHz 1.6 mA @ SYSCLK=26MHz
	Deep Sleep	<4.1 µA
Interfaces	SPI, SDIO, I2S, I2C, UART, PWM, ADC, GPIO, USB	

## SOFTWARE

Networking	IPv4, IPv6, HTTP(s), SNTP, MQTT, HTTPv2, Websocket, LWM2M, CoAP, FOTA
Security	Anti-clone protection, Secure boot
Data Rate	DL: 128 kbps UL: 158 kbps
Positioning	OTDOA (Observed Time Difference Of Arrival)
Bluetooth (optional)	BT 4.0 LE
GNSS (optional)	GPS, GLONASS, Galileo, Beidou

## CERTIFICATES

FCC	Pending
CE	Pending
GCF	Pending
PTCRB	Pending